

AMENDMENTS TO THE CLAIMS:

1-11. (previously cancelled)

12. (currently amended): An isolated nucleic acid fragment encoding an APS adenosine 5'-phosphosulfate kinase comprising:

- (a) a nucleotide sequence encoding an amino acid sequence of at least 80% sequence identity, based on the Clustal method of alignment, when compared to SEQ ID NO:4; or
- (b) a full-length complement of the nucleotide sequence of (a).

13. (currently amended): The isolated nucleic acid fragment of Claim 12 4 wherein the nucleic acid fragment is a functional RNA.

14. (currently amended): The isolated nucleic acid fragment of Claim 12 4, wherein the nucleotide sequence of (a) comprises SEQ ID NO:3.

15. (currently amended): A ~~chimeric-gene~~ recombinant DNA construct comprising the isolated nucleic acid fragment of Claim 12 4 operably linked to at least one regulatory sequence.

16. (currently amended): A transformed host cell comprising the ~~chimeric gene~~ recombinant DNA construct of Claim 15 4.

17. (currently amended): A method of altering the level of expression of a ~~sulfate-assimilation~~ an adenosine 5'-phosphosulfate kinase protein in a host cell comprising:

- (a) transforming a host cell with the ~~chimeric-gene~~ recombinant DNA construct of Claim 15 4; and
- (b) growing the transformed host cell produced in step (a) under conditions that are suitable for expression of the ~~chimeric-gene~~ recombinant DNA construct,

wherein expression of the ~~chimeric-gene~~ recombinant DNA construct results in production of altered levels of a ~~sulfate-assimilation~~ an adenosine 5'-phosphosulfate kinase protein in the transformed host cell.

Claims 18-19 (cancelled)